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EXAMINER

CHOW, LIXI

ART UNIT	PAPER NUMBER
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2627

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	04/05/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 04/05/2007.

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Office Action Summary	Application No. 10/670,365	Applicant(s) PARK ET AL.	
	Examiner Lixi Chow	Art Unit 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-50 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-50 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
2. Claims 1-3, 7-11, 14-17, 19, 20, 22, 23, 25-29, 33-37, 40-43, 45, 46, 48 and 49 are rejected under 35 U.S.C. 102(e) as being anticipated by Fukasawa (US 6,615,363).

Regarding claim 1:

Fukasawa discloses a method for managing a defective area on a recording medium of writable once type, the recording medium including a data area, the data area having a spare area, the method comprising:

(a) detecting an existence of a defective area within the data area of the recording medium once data are written onto the data area in a data writing operation (see Fig. 5, step 1204);

(b) writing data written in the defective area onto the spare area if the defective area is detected (see Fig. 5, step 1208);

(c) writing temporary management information pertaining to the defective area, onto a temporary management area on the recording medium (Fig. 5, step 1212); and

(d) writing access information for accessing the temporary management information, onto a reserved area on the recording medium (see Figs. 2-3; management area 20 is the

temporary management area; in order for the management area 20 to be located and read out, the access information has to be written in a reserved area).

Regarding claim 2:

Fukasawa discloses the method as claimed in claim 1, wherein in the writing step (c), the temporary management area is located within a non-user data area of the data area on the recording medium (see Fig. 1, 7 or 8; temporary management area corresponds to area 20sub1, and user data area corresponds to area 30sub1).

Regarding claim 3:

Fukasawa discloses the method as claimed in claim 2, wherein the recording medium includes first and second recording layers having first and second data areas, respectively, and wherein in the writing step (c), the temporary management area includes first and second temporary management areas respectively located within the first and second data areas (see col. 12, lines 36-38; it is inherent that each recording layer will have the same format as the one shown in Fig. 1, 7 or 8).

Regarding claims 7, 8 and 10:

Fukasawa discloses the method as claimed in claim 1, wherein in the writing step (d), the reserved area is located outside of the data area on the recording medium, wherein the reserved area is located in a lead-in area or a lead-out area on the recording medium (in order to access the management area 20, the lead-in area of the recording medium has to be read out first; therefore, the reserved area containing the access point of the management area 20 is inherently located outside of the data area or located in a lead-in area).

Regarding claim 9:

Fukasawa discloses the method as claimed in claim 7, wherein the recording medium includes first and second recording layers having first and second data areas, respectively, and wherein in the writing step (d), the reserved area includes first and second reserved areas respectively located outside of the first and second data areas (see col. 12, lines 36-38 and the explanation provided for claim 7).

Regarding claim 11:

Fukasawa discloses the method as claimed in claim 10, wherein the recording medium includes first and second recording layers having first and second data areas, respectively, in the writing step (c), the temporary management area includes first and second temporary management areas respectively located within the first and second data areas (see col. 12, lines 36-38; it is inherent that each recording layer will have the same format as the one shown in Fig. 1, 7 or 8),

and in the writing step (d), the reserved area includes first and second reserved areas respectively located outside of the first and second data areas.(see explanation provided for claim 7).

Regarding claim 14:

Fukasawa discloses the method as claimed in claim 1, wherein in the writing step (c), the temporary management information includes temporary defect list (TDFL) information having at least one temporary defect list (TDFL), the at least one temporary defect list identifying a location of the defective area and a location of a replacement area in the spare area corresponding to the defective area (see col. 11, lines 47-52).

Regarding claim 15:

Fukasawa discloses the method as claimed in claim 14, wherein the at least one TDFL further includes status information identifying whether a defect is present in the replacement area of the spare area (see col. 11, lines 62-67).

Regarding claim 16:

Fukasawa discloses the method as claimed in claim 15, further comprising:

(e) examining status information in a current defect entry of the at least one TDFL during a data reproduction operation (see col. 5, lines 54-65; the temporary management information includes attribute information; therefore the status or attribute information is inherently examined during data reproduction); and

(f) disregarding data reproduced using a previous defect entry associated with the current defect entry, if the status information in the current defect entry indicates that a defect is present in a part of the spare area associated with the previous defect entry (see col. 11, lines 60-67; Fukasawa disregards the previous list when there is a defect area in the replacement area).

Regarding claim 17:

Fukasawa discloses the method as claimed in claim 1, wherein in the writing step (d), the access information includes temporary disc definition structure (TDDS) information identifying location information pertaining to the temporary management information on the recording medium (see explanation provided for claim 1, step (d)).

Regarding claim 19:

Fukasawa discloses the method as claimed in claim 1, further comprising:

(g) transferring, at finalization of a data writing operation on the recording medium, the temporary management information and the access information as defect management area

(DMA) information into an area outside of the data area on the recording medium (see col. 12, lines 25-29).

Regarding claim 20:

Fukasawa discloses the method as claimed in claim 19, wherein in the transferring step (g), the area outside of the data area is a lead-in area or a lead-out area on the recording medium (see Fig. 1, DMA corresponds to area 10a, which is a lead-in area).

Regarding claim 22:

Fukasawa discloses a method for managing a defective area on a recording medium of writable once type, the recording medium including a data area, the data area having a spare area, the method comprising:

writing data written in the defective area onto the spare area if the defective area is detected (see Fig. 5, step 1208);

writing temporary management information pertaining to the defective area, onto a temporary management area on the recording medium (Fig. 5, step 1212);

writing access information for accessing the temporary management information, onto a reserved area on the recording medium (in order for the management area 20 to be located and read out, the access information has to be written in a reserved area); and

transferring, at finalization of a data writing operation on the recording medium, the temporary management information and the access information as defect management area (DMA) information into another area on the recording medium (see col. 12, lines 25-29).

Regarding claim 23:

Fukasawa discloses the method as claimed in claim 22, wherein in the transferring step, the another area on the recording medium includes at least one of a lead-in area and a lead-out area on the recording medium (see Fig. 1, the management area 10a is located in the lead-in area).

Regarding claims 25-27:

Claims 25-27 are apparatus and/or recording medium claims recite similar limitations as in claims 1 and 22; hence, claims 25-27 are rejected under the same reasons set forth in claims 1 and 22.

Regarding claim 28:

Fukasawa discloses the recording medium as claimed in claim 27, wherein the data area includes a user data area and a non-user data area, and the temporary management area is located within the non-user data area on the recording medium (see Fig. 1, 7 or 8; area 30sub1 is data area and area 20sub1 is non-user data area, which is where the temporary management area located).

Regarding claim 29:

Claim 29 recites similar limitations as in claim 11; hence claim 29 is rejected under the same reason set forth in claim 11.

Regarding claims 33-37, 40-41 and 45-46:

Claims 33-37, 40-41 and 45-46 recite similar limitations as in claims 7-11, 14-15 and 19-20, respectively. Hence, claims 33-37 are rejected under the same reasons set forth in claims 7-11.

Regarding claim 42:

Fukasawa discloses the recording medium as claimed in claim 40, wherein the location of the defective area and the location of a replacement area in the spare area corresponding to the defective area are represented in physical sector numbers (the defective area and the replacement area are inherently represented by physical sector numbers, because this permits the data in the replacement area to be located and reproduced).

Regarding claim 43:

Fukasawa discloses the recording medium as claimed in claim 27, wherein the access information includes temporary disc definition structure (TDDS) information identifying location information pertaining to the temporary management information on the recording medium (see explanation provided for claim 1, step (d)).

Regarding claims 48 and 49:

These claims recite similar limitations as in claims 27 and 45-46; hence claims 48 and 49 are rejected under the same reasons set forth in claims 27 and 45-46.

3. Claims 1, 4, 5, 12, 27, 30, 31 and 38 are rejected under 35 U.S.C. 102(e) as being anticipated by Kim et al. (US 6,564,345; hereafter Kim).

Regarding claim 1:

Kim discloses a method for managing a defective area on a recording medium of writable once type, the recording medium including a data area, the data area having a spare area, the method comprising:

(a) detecting an existence of a defective area within the data area of the recording medium once data are written onto the data area in a data writing operation (see col. 4 lines 24-30);

(b) writing data written in the defective area onto the spare area if the defective area is detected (see Fig. 2 or 3);

(c) writing temporary management information pertaining to the defective area, onto a temporary management area on the recording medium (see col. 4, lines 38-40); and

(d) writing access information for accessing the temporary management information, onto a reserved area on the recording medium (it is inherent that the access information is recorded, therefore the temporary management information can be located).

Regarding claim 4:

Kim discloses the method as claimed in claim 1, wherein in the writing step (c), the temporary management area is located outside of the data area on the recording medium (see Fig. 10; T-PDL is the temporary management area).

Regarding claim 5:

Kim discloses the method as claimed in claim 4, wherein the temporary management area is located in a lead-in area on the recording medium (see Fig. 10).

Regarding claim 12:

Kim discloses the method as claimed in claim 4, wherein in the writing step (d), the reserved area is also located outside of the data area on the recording medium (see col. 2, Table 1; DDS recorded in the lead-in area includes reserved areas).

Regarding claims 27, 30, 31 and 38:

These claims recite similar limitations as in claims 1, 4, 5 and 12; therefore claims 27, 30, 31 and 38 are rejected under the same reasons above as being anticipated by Kim.

4. Claims 1-14, 17, 19, 20, 22, 23, 25-40, 42, 43, 45, 46, 48 and 49 are rejected under 35 U.S.C. 102(e) as being anticipated by Hwang et al. (US Pub. No. 2004/0179458; hereafter Hwang).

Regarding claims 1:

Hwang discloses a method for managing a defective area on a recording medium of writable once type, the recording medium including a data area, the data area having a spare area, the method comprising:

(a) detecting an existence of a defective area within the data area of the recording medium once data are written onto the data area in a data writing operation (see paragraph [0025]);

(b) writing data written in the defective area onto the spare area if the defective area is detected (see Fig. 2, the spare areas are used for replacing data written in the defective area);

(c) writing temporary management information pertaining to the defective area, onto a temporary management area on the recording medium (see Fig. 2, TDFL and TDDS areas are used for writing temporary management information); and

(d) writing access information for accessing the temporary management information, onto a reserved area on the recording medium (see Fig. 2, TDDS area is used for writing access information).

Regarding claim 2:

Hwang discloses the method as claimed in claim 1, wherein in the writing step (c), the temporary management area is located within a non-user data area of the data area on the recording medium (see Fig. 2).

Regarding claim 3:

Hwang discloses the method as claimed in claim 2, wherein the recording medium includes first and second recording layers having first and second data areas, respectively, and wherein in the writing step (c), the temporary management area includes first and second temporary management areas respectively located within the first and second data areas (see Fig. 1B and paragraph [0123]).

Regarding claim 4:

Hwang discloses the method as claimed in claim 1, wherein in the writing step (c), the temporary management area is located outside of the data area on the recording medium (see Fig. 2).

Regarding claim 5:

Hwang discloses the method as claimed in claim 4, wherein the temporary management area is located in a lead-in area on the recording medium (see Fig. 2).

Regarding claim 6:

Hwang discloses the method as claimed in claim 4, wherein the recording medium includes first and second recording layers, the first recording layer having a first data area and a lead-in area, the second recording layer having a second data area and a lead-out area, and wherein the temporary management area and the reserved area are both located within at least one of the lead-in area of the first recording layer and the lead-out area of the second recording layer (see Fig. 1B and Fig. 2).

Regarding claim 7:

Hwang discloses the method as claimed in claim 1, wherein in the writing step (d), the reserved area is located outside of the data area on the recording medium (see Fig. 2, TDDS area is the reserved area).

Regarding claim 8:

Hwang discloses the method as claimed in claim 7, wherein the reserved area is located in a lead-in area or a lead-out area on the recording medium (see Fig. 2).

Regarding claim 9:

Hwang discloses the method as claimed in claim 7, wherein the recording medium includes first and second recording layers having first and second data areas, respectively, and wherein in the writing step (d), the reserved area includes first and second reserved areas respectively located outside of the first and second data areas (see Fig. 1B and 2).

Regarding claim 10:

Hwang discloses the method as claimed in claim 2, wherein in the writing step (d), the reserved area is located outside of the data area on the recording medium (see Fig. 2).

Regarding claim 11:

Hwang discloses the method as claimed in claim 10, wherein the recording medium includes first and second recording layers having first and second data areas, respectively, in the writing step (c), the temporary management area includes first and second temporary management areas respectively located within the first and second data areas, and in the writing step (d), the reserved area includes first and second reserved areas respectively located outside of the first and second data areas (see Fig. 2 and paragraph [0123]).

Regarding claim 12:

Hwang discloses the method as claimed in claim 4, wherein in the writing step (d), the reserved area is also located outside of the data area on the recording medium (see Fig. 2).

Regarding claim 13:

Hwang discloses the method as claimed in claim 12, wherein the recording medium includes first and second recording layers having first and second data areas, respectively, in the writing step (c), the temporary management area includes first and second temporary management areas respectively located outside of the first and second data areas, and in the writing step (d), the reserved area includes first and second reserved areas respectively located outside of the first and second data areas (see Fig. 1B and 2).

Regarding claim 14:

Hwang discloses the method as claimed in claim 1, wherein in the writing step (c), the temporary management information includes temporary defect list (TDFL) information having at least one temporary defect list (TDFL), the at least one temporary defect list identifying a location of the defective area and a location of a replacement area in the spare area corresponding to the defective area (see paragraph [0077]).

Regarding claim 17:

Hwang discloses the method as claimed in claim 1, wherein in the writing step (d), the access information includes temporary disc definition structure (TDDS) information identifying location information pertaining to the temporary management information on the recording medium (see Fig. 2).

Regarding claim 19:

Hwang discloses the method as claimed in claim 1, further comprising: (g) transferring, at finalization of a data writing operation on the recording medium, the temporary management information and the access information as defect management area (DMA) information into an area outside of the data area on the recording medium (see paragraph [0057]).

Regarding claim 20:

Hwang discloses the method as claimed in claim 19, wherein in the transferring step (g), the area outside of the data area is a lead-in area or a lead-out area on the recording medium (see Fig. 2).

Regarding claims 22, 23, 25-40, 43, 45, 46, 48 and 49:

These claims recite similar limitations as in claims 1-14, 17, 19 and 20; hence, these claims are rejected under the same reasons above as being anticipated by Hwang.

Regarding claim 42:

Hwang discloses the recording medium as claimed in claim 40, wherein the location of the defective area and the location of a replacement area in the spare area corresponding to the defective area are represented in physical sector numbers (see paragraph [0075]).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 18 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukasawa in view of Ito et al. (US 7,184,377; hereafter Ito).

Regarding claim 18:

Fukasawa does not, but Ito discloses a method for managing a defective area on a recording medium, the method comprising:

writing access information for accessing a management information onto a reserved area on the recording medium, wherein the access information includes flag information indicating whether at least one of the spare area and the temporary management area is full (see Fig. 7, item #208).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the invention of Fukasawa to further include the flag information in the access information. One of ordinary skill in the art would have been motivated to do this, because status of the spare area can be quickly obtained.

Regarding claim 44:

Claim 44 recites similar limitations as in claim 18; hence claim 44 is rejected under the same reason above as being unpatentable over Fukasawa in view of Ito.

7. Claims 21, 24, 47 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukasawa in view of Applicant's Admitted Prior Art (AAPA).

Regarding claim 21:

Fukasawa does not specify that the recording medium is a Blu-ray Disc Write Once; however, AAPA discloses a Blu-ray Disc Write Once (BD-WO) that has been developed and known (see paragraph [0009]).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to perform Fukasawa's defect management method in a Blu-ray write once type

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disc. One of ordinary skill in the art would have been motivated to do this, because defect management for high density optical disc, such as the Blu-ray Disc Write Once can be achieved.

Regarding claims 24, 47 and 50:

These claims recite similar limitation as in claim 21; hence, these claims are rejected under the same reasons above as being unpatentable over Fukasawa in view of AAPA.

8. Claims 6, 12, 32 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim in view of Nishiuchi et al. (US 6,795,389; hereafter Nishiuchi).

Regarding claim 6:

Kim discloses a method for managing a defective area on a single layer recording medium, and fails to teach a double layer recording medium. However, Nishiuchi disclose a method for managing a defective area on a double layer recording medium, wherein the recording medium includes a first and second recording layers, the first recording layer having a first data area and a lead-in area, the second recording layer having a second data area and a lead-out area and wherein a management area and a reserved area are both located within at least one of the lead-in area of the first layer and the lead-out area of the second layer (see Fig. 1 and col. 8, lines 4-25).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the method of Kim thereby realizing the method for managing defective area on a double layer recording medium as taught by Nishiuchi. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to do this, because defect management for multilayer or high density recording medium can be realized.

Regarding claim 13:

The combination of Kim and Nishiuchi discloses the method in claim 13. See the above rejection in regards to claims 4, 12 and 6.

Regarding claims 32 and 39:

These claims recite similar limitations as in claims 6 and 13; therefore claims 32 and 39 are rejected under the same reasons above as being unpatentable over Kim in view of Nishiuchi.

9. Claims 18 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hwang in view of Ito.

Regarding claim 18:

Hwang fails to disclose a flag information indicating whether at least one of the spare area and the temporary management area is full; however, Ito discloses a method for managing a defective area on a recording medium, the method comprising:

writing access information for accessing a management information onto a reserved area on the recording medium, wherein the access information includes flag information indicating whether at least one of the spare area and the temporary management area is full (see Fig. 7, item #208).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the invention of Hwang to further include the flag information in the access information. One of ordinary skill in the art would have been motivated to do this, because status of the spare area can be quickly obtained.

Regarding claim 44:

Claim 44 recites similar limitations as in claim 18; hence claim 44 is rejected under the same reason above as being unpatentable over Hwang in view of Ito.

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10. Claims 21, 24, 47 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hwang in view of Applicant's Admitted Prior Art (AAPA).

Regarding claim 21:

Hwang does not specify that the recording medium is a Blu-ray Disc Write Once; however, AAPA discloses a Blu-ray Disc Write Once (BD-WO) that has been developed and known (see paragraph [0009]).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to perform Hwang's defect management method in a Blu-ray write once type disc. One of ordinary skill in the art would have been motivated to do this, because defect management for high density optical disc, such as the Blu-ray Disc Write Once can be achieved.

Regarding claims 24, 47 and 50:

These claims recite similar limitation as in claim 21; hence, these claims are rejected under the same reasons above as being unpatentable over Hwang in view of AAPA.

Conclusion

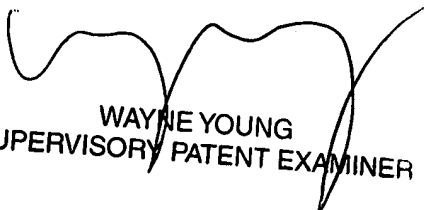
11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lixi Chow whose telephone number is 571-272-7571. The examiner can normally be reached on Mon-Fri, 8:30am to 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on 571-272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LC 3/29/07


WAYNE YOUNG
SUPERVISORY PATENT EXAMINER